

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

(LN 4271)

AUGUST 2018

Sub. Code: 4271

**B.PHARM. EXAMINATION  
FOURTH YEAR  
PAPER V – MEDICINAL CHEMISTRY - II**

*Q.P. Code : 564271*

**Time: Three hours**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Elaborate the medicinal chemistry aspects of anti-malarials with emphasis on history, chemical classification with examples, mechanism of action of each class and synthesis of any two drugs.
2. a) Discuss elaborately about electronic and steric parameters in a QSAR study.  
b) Write in detail about Hansch analysis and free Wilson analysis.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Brief on anti-metabolites.
2. Outline the synthesis of : i) Chloramphenicol ii) Para Amino Salicylic acid.
3. Write briefly about synthetic hypoglycaemic agents.
4. Discuss briefly the chemistry of erythromycin and discuss the advantages of semisynthetic erythromycins.
5. Write the chemistry of estrogens.
6. Write a note on antifungal antibiotics.
7. Write in detail about solid phase synthesis.
8. Write briefly about anti-hyperlipidemic agents.

**III. Short answers on:**

**(10 x 2 = 20)**

1. Write a note on cationic local anti-infective agents.
2. Brief out the mechanism of action of sulphonamides.
3. Write the synthesis of guanethidine.
4. Write a short note on reverse transcriptase inhibitors.
5. Write the structure and uses of Congo-red.
6. Write the spectrum of activity of second generation cephalosporins.
7. Write a short note on molecular mechanics.
8. Write the structure of any two mineralocorticoids.
9. Write a note on tissue amoebicides.
10. Write the structure and uses of Phenytoin Sodium.

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